



# PIFSC/HIHWNMS 2019 PMNM cruise



## Background:

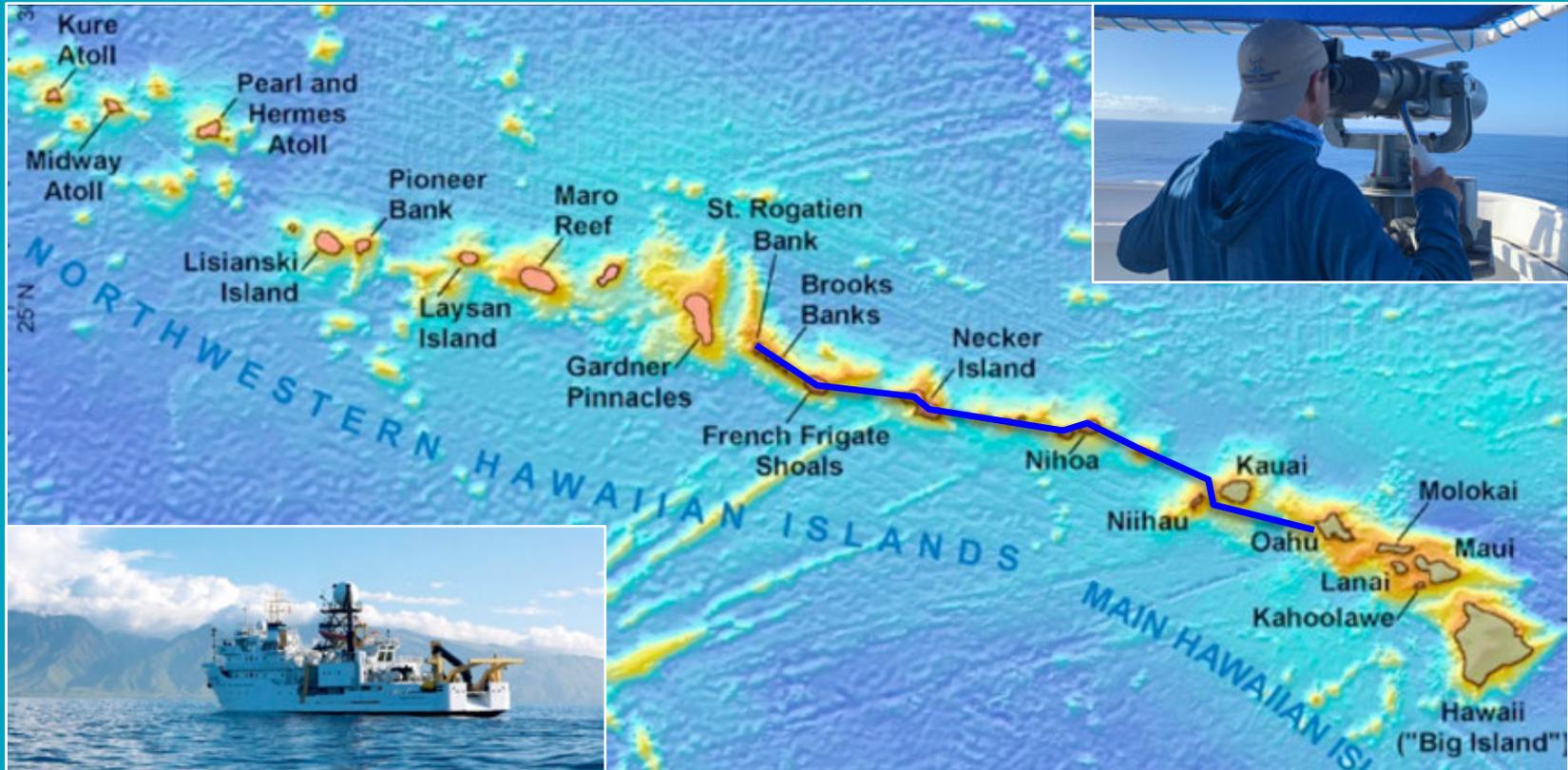
- PIFSC HICEAS cruise was re-scheduled to 2020 due to govt. shutdown
- Erin Oleson re-programmed 12 sea days on R/V Oscar Sette for acoustic gear testing and to look for humpback whales in PMNM

## Cruise details:

- Cruise was staffed and led by PIFSC with 2 HIHWNMS scientist participating (M. Lammers & S. Thompson)
- Six days spent in PMNM waters (April 3-9)
- Survey effort focused on shallow water banks
- Data targeted: sighting #s, fluke IDs, biopsy samples, towed-array/sonobuoy recordings and satellite tagging



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- Approximately 180 whales sighted, including at least 13 calves
- 47 fluke IDs and 10 biopsy samples were collected



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## Significance of findings:

- More whales in PMNM than expected
- Whales are clearly using the Monument for breeding
- Could support re-distribution hypothesis for low whale #s in MHI
- PMNM could represent “missing breeding ground” from SPLASH

## Still TBD:

- Are PMNM and MHI whales part of the same contiguous breeding area?
- How far up the archipelago do whales occur?
- Where are the hot spots?
- Could western DPS whales be breeding in the NWHI?